

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	HAIRFIELD)	
SERIAL NO.:	10/782,638)	ART UNIT: 3762
FILED:	FEBRUARY 19, 2004)	EXAMINER: FLORY, CHRISTOPHER A.
FOR:	Water Electrode)	CONF. NO.: 4127

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 CFR § 1.131/1.132

Dear Sir:

The undersigned inventor of the referenced application hereby attests as follows:

1. I, the undersigned Wade E. Hairfield, am the correct inventor of the presently claimed subject matter of the referenced application.
2. Certain claims of my patent application stand rejected under 35 U.S.C. 102(e) as anticipated by Tucek (U.S. Patent Publication 2004/0138708, hereinafter referred to as Tucek).
3. The filing date of Tucek is January 15, 2003. No priority to a previous application is claimed. Accordingly, the effective date of Tucek as a 102(e) reference is January 15, 2003.
4. I reduced the invention claimed in the pending application to practice in August 2002. The actual reduction to practice included the construction of a working prototype.

5. August 2002 is prior to the effective date of the Tucek reference.
6. The actual reduction to practice in August 2002 occurred in the United States of America.
7. Attached to this Declaration is the following evidence of the actual reduction to practice in August of 2002. The attached records include:
 - a. A photograph of the prototype device;
 - b. Various design sketches and schematic diagrams prepared prior to or in August 2002;
 - c. A part and material list and task list prepared for the completion of a working prototype in August 2002.
8. All statements made herein of the undersigned's own knowledge are true, all statements made herein on information and belief are believed to be true, and all statements made herein are made with the knowledge that whoever, in any manner within the jurisdiction of the Patent and Trademark Office, knowingly and willfully falsifies, conceals or covers up by any trick, scheme or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties set forth under 18 USC Section 1001, and that violations of this paragraph may jeopardize the validity or enforceability of any patent or certificate resulting therefrom.

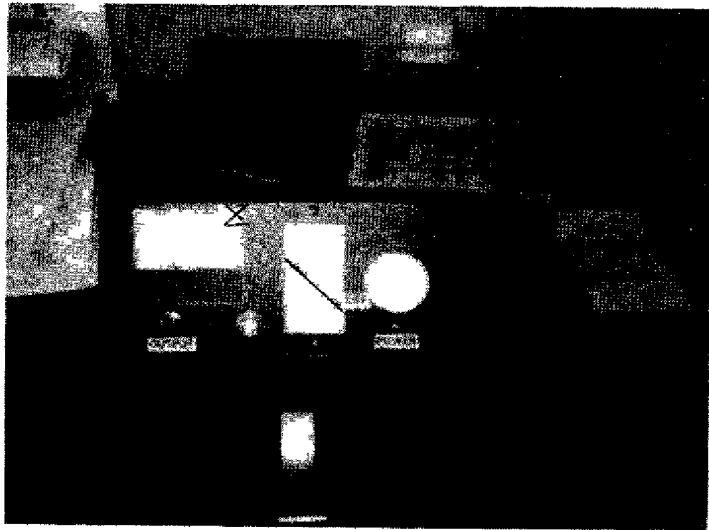
Respectfully submitted,

JAN 29TH, 2007
Date

Wade E. Hairfield
Wade E. Hairfield

Attachment a. to Declaration

A photograph of the prototype device

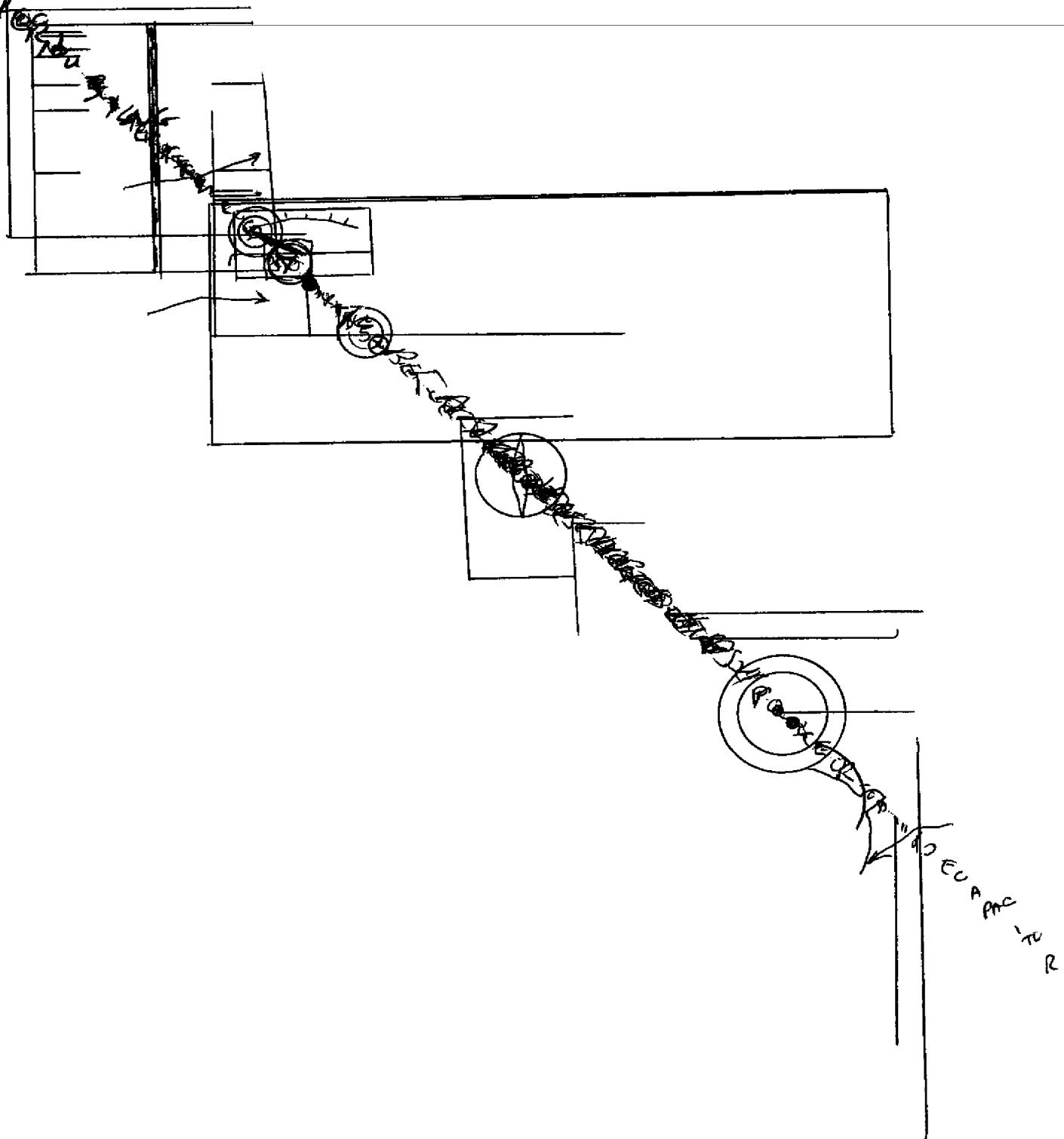


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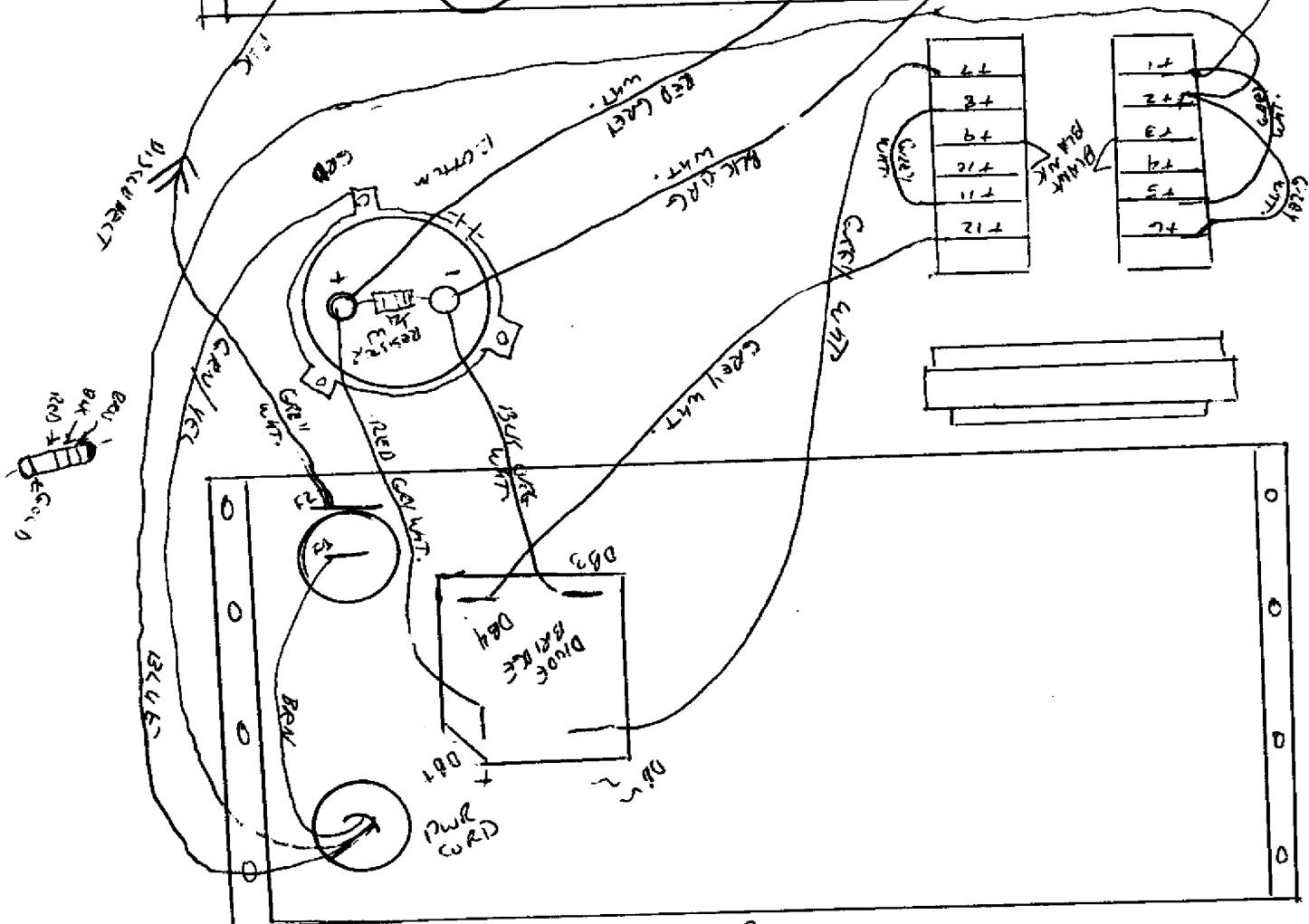
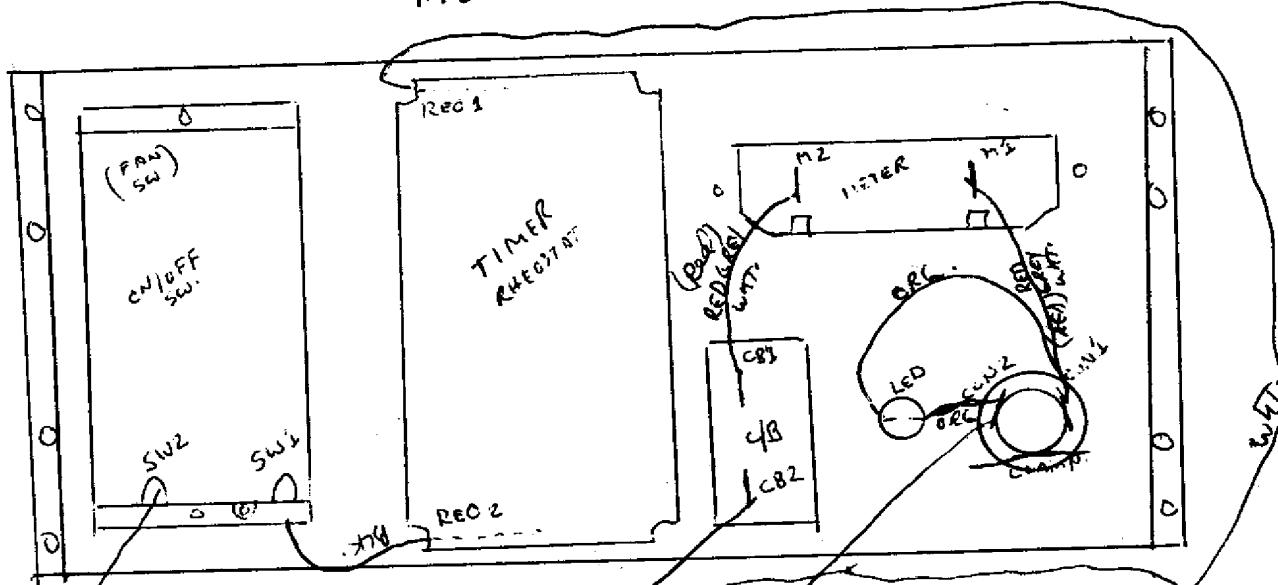


Attachment b. to Declaration

**Various design sketches and schematic diagrams
prepared prior to or in August 2002**



FRONT PNL & P. REAR



BACK PNL. (INSIDE)

CORD BRN → point
 CORD GRN/YEL → F1
 CORD BLUE → T2 → T6
 (F1, T2, T6 are red term)

F2 → DISCONNECT
 (W1, W2 are black)

C. O. 1 → REC 2

DB + RED GRY → CAP + POS.
 (WHT.)

DB 1 → PINK GRY → BLUE
 (PINK, WHT.)

DB 3 → BLACK GRY → CAP — NEG
 (WHT.)

DB 4 → GREY → BLUE
 (WHT.)

CAP + POS → RED GRN → PINK
 (WHT.) → CB 2

CAP - NEG → BLUE AND
 (BLK ORG)
 (WHT.) → CON 1 → CON 2 → LED.
 (PINK, GOLDEN)

LED → ORG. → CON 1 → CON 2 → LED.
 (PINK, GOLDEN)

M 2 → PINK → RED GRY → WHT.
 (WHT.) → CB 1 → T 4 → T 5 → PINK

REC 1 → WHT. → T 4 → T 5 → PINK

T 8 → PINK → GREY → WHT.
 (WHT.) → T 11 → PINK

LUGAGE DISC.

BLUE push on
||||

PINK push on
|||||

#8 RING (RED) TER

!
BLUE RING TER
|||||

1602

CARD 1 GRN/YEL → GROUND 1
CARD 2 BLK → BCK. T2
DISC. 1
CARD 3 BROWN → F2

T5 GRN → BR2
T4 GRN/YEL → NOT USED
T3 GRN → BJC 4

F1 BJC → TIMER 1

TIMER 2 BJC → BCK SW2
DISC 2

T4 BJC → BCK SW2

LED 3 ORG. → CON. 1

LED 2 ORG. → CON. 2

M1 RED → CON. 2

M2 RED → CB 4

-CAP. 2 BCK. → CON. 2

+ CAP. 2 RED → CB2

-CAP. 2 BCK. → BR3

+ CAP. 2 RED → BR4

Attachment c. to Declaration

**A part and material list and task list prepared for the
completion of a working prototype in August 2002**

DESIGN NOTES & ASSY. PROC. AUG 2002

WIRE CHART

$G_1 \rightarrow C_1^N$	RED	RING TERM	SOLDER/SLV.	TERMINAL GC
$G_2 \rightarrow C_{B1}$	RED	RING TERM	PUSH-ON.	
$L_2 \rightarrow C_{B1}$	RED	PUSH-ON	SOLD/SLV.	
$I_1 \rightarrow \text{CON.GL.}$	BLK.	SOLD/SLV.	RING TERM	
$\overset{\text{DISC}}{\text{CCR}} \rightarrow \text{DISCON.}$	BLK.	RING TERM	DISCONNECT.	
$\text{DISCON} \rightarrow \text{CAP "NEG."}$	BLK.	RING TERM	DISCONNECT.	
$C_{B2} \rightarrow \text{CAP "PO"}$	RED	RING TERM		
CAP "PS" \rightarrow DB + RED		PUSH-ON.		1 PC NTES322 C13B
$\text{CAP "NEG."} \rightarrow C_{B0}$	BLK.	PUSH-ON.		
$\text{DB "AC"} \rightarrow T_1$	RED	" "		
$\text{DB "AC"} \text{ OPS.SIDE} \rightarrow T_6$	BLK.	" "		
$\text{REC 1} \rightarrow \text{PLW 1}$	BLK. STRAND	SINGLE	STRIP ON/OFF.	
$\text{PLW 2} \rightarrow \text{DISCONN 2}$	BLK. STRAND	SINGLE	DISCONN. PUSH-ON.	
$\text{DISCONN 2} \rightarrow \text{PLUGD BRN.}$			PUSH-ON.	
$F_1 \rightarrow \text{REC 2}$	BLK	PUSH-ON - STRIP.		
$F_2 \rightarrow T_8$	BLK.	PUSH-ON.		
$F_8 \rightarrow F_{12}$	BLK.	PUSH-ON		
$F_3 \rightarrow \text{PLUGD BLUE}$		PUSH-ON.		
$F_4 \rightarrow +7$	RED	PUSH-ON		
$+7 \rightarrow T_{11}$	RED	PUSH-ON		
$\text{PLUGD GRN/YEL} \rightarrow T_{GRD}$		RING-TERM,		
$+2 \rightarrow +5$	BLK.		PUSH-ONS (2)	

GRAINGER

3900 GREENBRIAR DR. STAFFORD 281 240-444

MAGNETEK INC.

2100 BERING DR. HOUSTON 281 344-0240

POWER REPS INC.

10701 CORPORATE DR. STAFFORD 281 494-2187

A V ELECTRONICS

6186 14-6-N 281 856 2188

FORGE ELECTRONICS

10803 KINGHURST 281 561-8641

FUTURE ELECTRONICS

10333 RICHMOND AVE. 713 785-1155

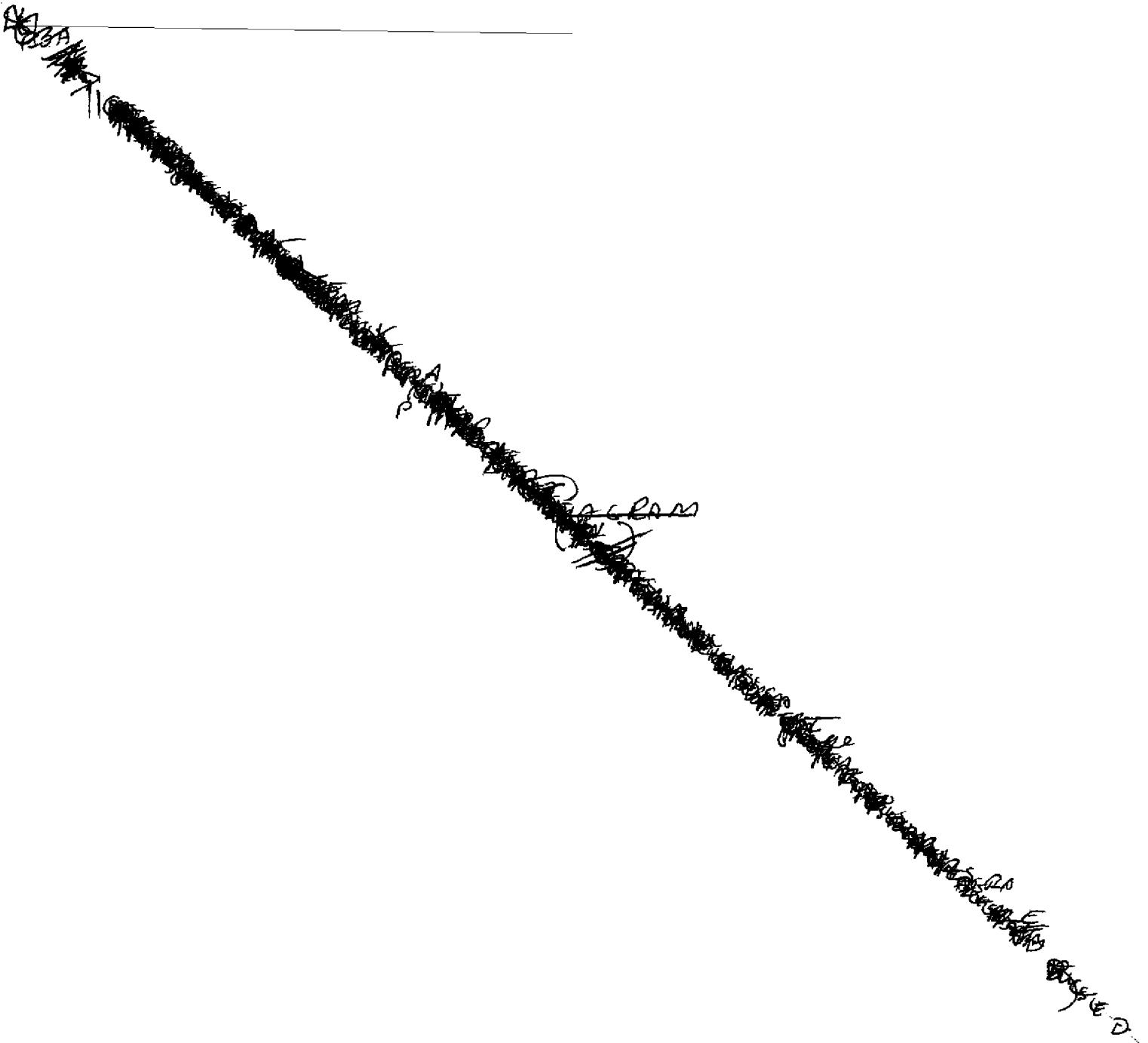
NEWARK ELECTRONICS

8181 COMMERCE PARK HOUSTON 713 270-9800

PAX 514 428-7523

BOM ATTN: RACHEL

SOURCE BOOK



FINISH ASSY DRAWINGS / WIRE LIST / GOM
TAKE PICTURES

I-D. ON/OFF SW. & CAP. & CIB.
FIND

CIB ID

FUSES & HOLDERS ID

XFMR. TIES STRAPPING-

<u>INPUT</u>	<u>OUTPUT</u>
110 → 120 VAC	5 AMP ADJ. DN. TO 1 AMP.

1 CASE

1 AMP METER

1 CIRCUIT BREAKER.

1 LED (GRN) DIODE

1 PWR. CORD

1 TRANSFORMER

1 DIODE BRIDGE

1 22,000 uF CAPACITOR & BRKT.

RED WIRE

BUK. WIRE

2 FUSE HOLDERS (GOT ONE)

2 4A FUSES AGC 250 V

1 PWR. CORD BUCKLE PLASTIC FITTING.

1 DC CONN. OUTLET JACK.

✓ 1 TIMER

1 on/off sw. (FAN etc)

1 DISCONNECT TERMINALS.

MANY INSULATED PUSH-ON TERMINALS.

Q CB PLATE

... SCREW INSULATOR Eagle plastic mouser[#] 56-04006 43-8902
... SPACER 8 STD Eagle plastic mouser[#] 561-1KSP172 36-0365
... 4-40 LOCK NUT NYLON Eagle plastic mouser[#] 561-H446 54-2302
... PIN R10466-ND
... STRAIN RELIEF (ROUND WIRE) DIGI-KEY 800 344-4539
... MOUNT CLIP 2" 374B DIGI-KEY P10103-ND
... BOX INSTRUMENT 8X8X4 DIGI-KEY HM339 (OLD STYLE BUC)
... CAPACITOR 22000uF 40V COMPUTER GRADE DIGI-KEY PIN P10078
... 28V 0.4A CER HOLDERS 56-012
... LAMP HOLDER mouser[#] 352-284 02-20481
... GEN RND LAMP HOLDER mouser[#] 35LT002
... FUSE HOLDER 1/4" DIGI-KEY[#] 283-2341
... CORD 18 AWG 3COND 75" BLACK SET DIGI-KEY[#] Q106
... RECTIFIER BRIDGE 12A 100V GBPC DIGI-KEY GBPC1201
... W58 SERIES CIRCUIT BREAKER SA DIGI-KEY[#] PB197-ND